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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,335	08/21/2001	William John Zelinski JR.	TZIN-005	8129

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EXAMINER

NGUYEN, PHONG H

ART UNIT PAPER NUMBER

3724

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/935,335	Applicant(s) ZELINSKI ET AL. <i>ad</i>	
	Examiner Phong H Nguyen	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. An Advisory action was mistakenly sent out on 07/20/2004. It is vacated.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. Claims 14 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "said liquid source" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. Claims 1, 5, 9, 10, 13-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroney (5,528,967) in view of Miles et al. (3,096,801), hereinafter Miles and an abstract of an article in the Journal of Food Science (enclosed in this Office Action), hereinafter the Journal abstract.

It is to be noted that the Journal abstract is merely used as rebuttal evidence to Applicant's 37 CFR 1.132 Affidavits.

Regarding claims 1, 5, 9 and 15, Maroney teaches a method of cutting cherries but would be capable of cutting potatoes. The cutting method of Maroney inherently

prevents the spread of diseases through a knife since there is no contact between the knife and the cherries. Furthermore, using water jet to cut potatoes is well known in the art as evidenced by the Journal abstract. Using water jet to cut cherries or potatoes is art equivalent. Therefore, it would have been obvious to use the Maroney's cherry cutting method to cut seed potatoes since the cutting method of Maroney can prevent the spread of diseases through a cutting knife and the cutting method of Maroney is capable of doing so since cutting potatoes or cherries by water jet is art equivalent.

The method of cutting potatoes by water jet for preventing the spread of disease through a knife as taught by Maroney comprising the steps of:

- supplying seed potatoes for planting;
- supplying a chamber 30 with a water jet 56 passing across the chamber;
- moving the seed potatoes for cutting through the water jet; and
- cutting the seed potatoes completely through with the water jet.

See Fig. 1, and col. 3, line 57-col. 4, line 53.

Maroney fails to teach the step of sizing the potatoes before conveying them to the water jet cutting station. Miles teaches sorter rollers 44 and 46 capable of sizing seed potatoes before conveying them to a cutting station. See Fig. 2. Therefore, it would have been obvious to one skilled in the art to modify the Maroney's cutting steps by adding the step of sizing potatoes to sort out potatoes with desired sizes before cutting them.

Regarding claims 10 and 16, a liquid source is inherently in a water jet system.

Regarding claims 14 and 20, a chemical additive is inherently in the water.

Regarding claims 13 and 19, two water jets 56 are best seen in Fig. 1 in Maroney. Since each water jet cuts a potato, there are multiple cuts caused by the two water jets.

5. Claims 2-4, 6-8, 11, 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroney (5,528,967) in view of Miles and the Journal abstract as applied to claims above, and further in view of Flaming (5,269,211).

Regarding claims 2, 6, 11 and 17, Maroney teaches the invention substantially as claimed except for a discharge tube to collect the spent water. Flaming teaches a discharge tube 276 to collect spent water in a water jet system. See Fig. 4. Therefore, it would have been obvious to one skilled in the art to provide a discharge tube as taught by Flaming to the water jet system of Maroney to collect the spent water.

Regarding claims 3 and 7, the water used by the water jet inherently contains a chemical additive. Moreover, see the arguments regarding this on page 7, which arguments are to be considered incorporated into the rejections as to why the additives would have been obvious if not inherent.

Regarding claims 4 and 8, two water jets 56 are best seen in Fig. 1 in Maroney. Since each water jet cuts a potato, there are multiple cuts caused by the two water jets.

Regarding claims 12 and 18, Flaming teaches providing the discharge tube at the termination point of the water jet. See Fig. 4.

6. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroney in view of Miles, the Journal abstract and Flaming, as applied to claims above, and further in view of Mirabello (6,125,729).

The combination of Maroney, Miles, the Journal abstract and Flaming does not disclose how to orient water jet nozzles to make multiple cuts on the seed potatoes.

Mirabello teaches using a plurality of water jets 26, 36 and 38 to make multiple cuts on a workpiece. See Figs. 1 and 3. Therefore, it would have been obvious to further modify the combination of Maroney, Flaming and Miles et al. by applying a plurality of water jets to cut a workpiece as taught by Mirabello to cut a seed potato into smaller pieces in less time.

7. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroney in view of Miles and the Journal abstract, as applied to claim 9 above, and further in view of Mirabello (6,125,729).

The combination of Maroney, Miles and the Journal abstract does not disclose how to orient water jet nozzles to make multiple cuts on the seed potatoes. Mirabello teaches using a plurality of water jets 26, 36 and 38 to make multiple cuts on a workpiece. See Figs. 1 and 3. Therefore, it would have been obvious to further modify the combination of Maroney, Flaming and Miles et al. by applying a plurality of water jets to cut a workpiece as taught by Mirabello to cut a seed potato into smaller pieces in less time.

Response to Amendment

8. Affidavits filed on 10/18/2004 and Applicant's arguments filed one 05/25/2004 have been fully considered but they are not persuasive.

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9. The Affidavits under 37 CFR 1.132 filed on 10/18/2004 by Mr. Jack Guenthner and by Ms. Amy Charkowski are insufficient to overcome the rejection of claims 1-20 based upon Maroney, Miles et al., Mirabello and Flaming as set forth in the last Office action.

The Affidavits state that the claimed subject matter solves a problem that was long standing in the art. However, there is no showing that others of ordinary skill in the art were working on the problem and if so, for how long. In addition, there is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

10. Applicant's main thrust in the Affidavits is using water jet to prevent the spread of disease through a knife. Since the Journal abstract teaches that it is known to cut potatoes by water jet, the reduction of the contamination would inherently follow since there is no contact between a knife and the potatoes. The Journal abstract does not teach in detail the water jet system. Maroney teaches a water jet system capable of performing the claimed steps. Thus, Maroney's water jet system is provided as evidence that the Applicant's claimed water jet system is well known in the art. It is reasonable to assume that in mass production, a sorting system for sorting products with desired sizes would be needed. Thus, a sorting system as taught by Miles et al. is provided for that.

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11. Applicant's arguments filed one 05/25/2004 have been fully considered but they are not persuasive.

The art of using a water jet to cut an organic material such as cherries or potatoes is well known in the art as evidenced by Maroney and the Journal of Food Science. Although the Journal abstract does not teach explicitly using water jet cutting to prevent the spread of disease, the process of cutting a potato by water jet inherently prevents the spread of the disease since there is no contact between a knife and a potato.

Applicant's arguments that the water jet of Maroney is for cutting cherries and cannot cut through a potato are not found persuasive. Cutting through a potato by water jet is well known in the art as evidenced by the Journal article. As one uses the Maroney's water jet system, one would adjust the pressure level of the water jet so that the water jet can cut through the potato. Such pressure adjustment involves routine skill in the art.

Regarding Applicant's arguments with respect to the chemical additives in the water jet, the water already has chemical additives due to normal water treatment process in a water treatment plant which most water in industry is subject to and Official Notice is so taken. Moreover, even in well, lake, or river water, there are chemical additives from the surrounding soil beds.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phong H Nguyen whose telephone number is 571-272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PN: *pn*

January 24, 2005



Allan N. Shoap
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